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The Effect of Receivable Turnover and Inventories Towards Liquidity of Cigarette Industries

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ABSTRACT

The purpose of this study was to investigate the influence of accounts receivable and inventory turnover on the liquidity of firms in the tobacco sub-sector listed on the IDX from 2017 to 2019. The study employs quantitative methodologies, including secondary data from financial statements, papers, journal articles, and three example firms. The firms analyzed are those in the tobacco sector listed on the Indonesian Stock Exchange and publish annual financial reports in both Rupiah and millions. Divide net sales by average accounts receivable to determine accounts receivable turnover. Inventories turnover is defined as the ratio of sales to average inventory. Liquidity is determined using the quick ratio, computed as the product of current assets and current liabilities. The results indicated that accounts receivable turnover had no meaningful influence on liquidity when considered concurrently and partly. Inventory turnover, whether it occurs concurrently or in stages, has a substantial impact on liquidity.

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INTRODUCTION

Each entrepreneur forms a business to conduct commercial operations with the objective of profit and employment creation. Globalization has resulted in the emergence of several industrial sectors, increasing competitiveness in this country's industrial world. Human resources must balance with innovation and competence in using science and technology. Today's business rivalry necessitates management's ability to make decisions based on a well-formulated plan.

Agriculture is a foundation of the Indonesian economy, implying that the country is hugely reliant on agricultural products. Be a result, Indonesia is referred to as an agricultural country. The enormous number of Indonesians who earn their living as farmers and agricultural laborers demonstrates this. Apart from that, the agricultural goods found in Indonesia are another evidence of the country's agricultural nature.

Tobacco is an agricultural crop that is grown as part of a plantation. Tobacco is the primary component of cigarettes. To produce cigarettes, tobacco must first be processed, resulting in the demand for labor. As a result, tobacco indirectly produces jobs.

The cigarette business has grown to be one of the most important industrial sectors in Indonesia. This is demonstrated by the enormous number of persons who begin smoking cigarettes during youth and continue until middle life. This circumstance necessitates that corporations create massive volumes of cigarettes in order to fulfill market demand. Automatically, as the quantity of output increases due to increased demand, the money

gained by the business increases as well, along with the amount of taxes that the business must pay.

Accounts receivable and inventory turnover ratios are critical for businesses because they indicate the efficiency of working capital. Liabilities are classed as either short-term or long-term. Short-term liquidity is included in current assets and short-term obligations. Inventory and accounts receivable turnover management must be accurate in the sense that current assets may cover short-term liabilities.

LITERATURE REVIEW

A. Accounts Receivable Turnover

After cash, receivables are the second most liquid current asset that may be used to satisfy a company's short-term credit commitments. Receivables are generated when a business engages in transactions such as selling products or services on credit or lending cash. Every business that sells on credit will inevitably generate accounts receivable, which will inevitably result in a turnover of accounts receivable. Receivables Turnover is a ratio that businesses use to determine how long it takes to collect accounts receivable or how frequently the monies inherent in these receivables rotate throughout a given period. [1]. The higher a company makes sales on credit, the more receivables that must be billed by the company so that there is an increase in accounts receivable turnover. Accounts receivable turnover rate which is getting higher can have an impact on the company. This occurs because of the large number of receivables that the company must collect, so that the company can reduce the possibility of bad debts, carry out business activities, pay corporate debts and streamline cash flow.

B. Inventory Turnover

Inventory is a critical current asset type since it is an active component of a business's operations that is constantly bought, altered, and subsequently sold to customers. Inventory is also critical in a business. Inventory is a critical asset for every business, whether retail, manufacturing, service or other [2].

The firm must assess inventory correctly because inventory planning enables the organization to fulfill customer requests swiftly and precisely while avoiding excess inventory that can result in wasteful use of cash. With inventory on hand, the company's activities will be simplified or accelerated since they are carried out continually to make and deliver items to consumers. Inventory turnover is one of the critical metrics that businesses must monitor in their operations. Inventory must be handled effectively since optimum inventory may boost a business's effectiveness, increasing its profitability. To retain sales, businesses must ensure inventory availability [3].

C. Liquidity

Accounts receivable turnover rate and inventory turnover rate affect the company's liquidity. The higher the accounts receivable turnover rate and the inventory turnover rate, the more likely the company will experience great success, this happens because the company can find out how far operational activities can be carried out. Companies are said to have optimal liquidity when the company has a larger number of liquid assets than illiquid assets. The companies store liquid assets to finance future investment opportunities with internal company funds because there is information about asymmetry - induced financing constraints [4]. Liquidity is a ratio used to measure a company's ability to meet short-term liabilities with short-term resources (current assets) available to meet these short-term obligations [5].

The calculation of the liquidity ratio has benefits for parties who have an interest in a company, either inside or outside the company. According to Jensen, the benefit of a

company's liquid assets is that the company can pay its short-term obligations on time. Liquidity can be calculated using the current ratio by dividing current assets by current liabilities.

METHODS

a. Determination of the Number of Samples

In this study, using the population of cigarette industry companies that have been listed on the Indonesia Stock Exchange. The cigarette industry sector listed on the Indonesia Stock Exchange has a sample of 3 companies studied during the 2017-2019 period that met the criteria, and published annual financial reports expressed in millions of rupiahs.

b. Sample Collection Method

In this study, using an associative approach research method, namely the research technique used to determine the influence and relationship between two or more variables. Collecting data in this research uses documentation techniques. In this study, using quantitative data sourced from secondary data. In collecting the sample, this study uses the criteria for cigarette industry companies listed on the Indonesia Stock Exchange, to issue annual financial reports in rupiah currency.

c. Operational Variables

In this research, operational variables are needed so that hypothesis testing using statistics can explain the identity used to determine the type of variable, determine the variables used, and describe the meaning of each variable correctly. The related variables used in this study are:

d. Independent Variable (X)

The independent variables used in this study are:

Accounts Receivable Turnover (X1) Accounts Receivable Turnover is calculated by dividing net credit sales by Average Receivables. Average receivables are obtained from adding Initial Receivables and Ending Receivables divided by two.

Inventory Turnover (X2) Inventory Turnover is calculated by dividing sales by the average inventory. Average inventory is obtained from starting inventory plus ending inventory and then divided by two.

e. Dependent Variable (Y)

Liquidity (Y) The liquidity ratio is intended to measure a company's ability to meet its short-term liabilities with its current assets, so use the current ratio or working capital ratio. The current ratio is obtained from the dividend between current assets and short-term liabilities.

f. Data analysis method

The method used is multiple linear regression analysis because it contains two or more variables. This method is used to determine the extent to which accounts receivable turnover and inventory turnover affect the liquidity of the cigarette company industry. The following is a multiple linear regression analysis model that will be used:

$$Y = a + b1X1 + b2X2$$

Information:

Y = Dependent variable (liquidity)

A = Constant number (constant)

b1, b2 = Regression coefficient

X1, X2 = Independent variable

g. Correlation Analysis

This analysis is used to measure the relationship between the related variable (Variable Y) and two or more independent variables (Independent). This analysis aims to determine the size of the strength or degree of closeness of a relationship that occurs between variables.

h. Analysis of the Coefficient of Determination

This analysis is used to determine the size of the suitability of multiple linear regression lines to a data. In addition, this analysis is also used to measure the

contribution of the independent variable to the dependent variable and as a determinant of the suitability of the multiple linear regression lines Y against X1 and X2 which is used to approach the linear relationship between variables on the basis of the research results.

RESULTS AND DISCUSSION

1. Classic Assumption Test

The purpose of doing this classical assumption test is to obtain authentic analysis results. The following is a test to prove whether or not these two classical assumptions are fulfilled.

c. Normality Test, the normality test is carried out to provide certainty that the inputted data has a normal distribution or not. In this study, the data normality test was tested using the P-P Plot of Regression Normal.

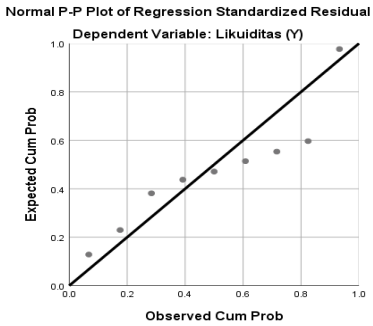

Figure 1: Normality test

Source: Processed Primary data (2021)

Based on the P-Plot image, it can be seen that the graph above shows the points that follow and approach the diagonal line. This means that the regression model fulfills the normality assumption.

d. Multicollinearity Test, this test is done to show the situation whether there is a strong relationship between the independent variables in a multiple regression model.

e. Table 1: Multiple Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.201	1.173		-.171	.870		
	Accounts Receivable Turnover (X1)	.014	.019	.197	.729	.493	.911	1.098
	Inventory Turnover (X2)	.619	.207	.810	2.995	.024	.911	1.098

Source: Processed Primary data (2021)

c. Based on the test results in the table above, it can be seen that the VIF value on all independent variables is <10 and the tolerance value> 0.1. That is, in this study the regression model does not occur multicollinearity problems, so the regression model can be used.

d. Autocorrelation Test, This test is conducted to determine whether there is a correlation variable in the model between the current period and the previous period.

Table 2. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.775[a]	.600	.467	.94383	2.065

Source: Processed Primary data (2021)

Based on the test results, it can be seen that the Durbin Watson (D-W) value is 2.07 while from the D-W table with a significance of 0.05 and the amount of data (N) 9, and the number of independent variables (K) 2, the DU value is 1.31988 and the DL value is 0.82428. because the DW value (2.065) is greater than the limit value of DU and less than (4-dU) = 4 - 1.31988 = 2.68012 so it can be concluded that there is no autocorrelation (in the area of doubt).

2. Hypothesis Testing

a. Simultaneous F Test, The F test is conducted to determine whether all independent variables can simultaneously influence the dependent variable [6].

Table 3. Simultaneous F Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.018	2	4.009	4.500	.064[b]
	Residual	5.345	6	.891		
	Total	13.363	8			

Source: Processed Primary data (2021)

Based on the table above, it can be seen that the F value is 4,500 and the significance level is 0.064> 0.05. So, it can be concluded that simultaneously the accounts receivable turnover variable and inventory turnover variable have no effect on liquidity (current ratio).

b. Partial T Test, T test is conducted to determine separately whether each independent variable affects the dependent variable [7].

Table 4. Partial T Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.201	1.173		-.171	.870		
	Account Receivable Turnover (X1)	.014	.019	.197	.729	.493	.911	1.098
	Inventory Turnover (X2)	.619	.207	.810	2.995	.024	.911	1.098

Source: Processed Primary data (2021)

- **Effect of Accounts Receivable Turnover on Liquidity**

The results of the t hypothesis test show that the significance value of receivables turnover is 0.493> 0.05. This means that hypothesis 1 is rejected, meaning that receivables turnover does not have a significant effect on liquidity in the cigarette sector companies. This shows that accounts receivable turnover does not have a significant effect on liquidity at cigarette companies listed on the IDX.

- **Effect of Inventory Turnover on Liquidity**

  Based on the results of the partial test, the significance value of inventory turnover is 0.024 <0.05. This means that hypothesis 2 is accepted, meaning that inventory turnover has a significant effect on liquidity in the cigarette sector companies. This shows that inventory turnover has a significant effect on liquidity in cigarette companies listed on the IDX.

c. Determination Coefficient Test (R^2) is the determination coefficient test (R^2) was conducted to determine the extent to which the independent variable could explain changes in the dependent variable.

Table 6. Determination coefficient test (R^2)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.775[a]	.600	.467	.94383	2.065

Source: Processed Primary data (2021)

Based on the results of the determination coefficient test in the table above, the value of R2 is 0.467. This means that accounts receivable turnover and inventory turnover simultaneously have a contribution to liquidity by 46.7%. While the remaining 53.3% is influenced by other variables which are not studied.

CONCLUSION

The following conclusions may be formed based on research findings and debate about the influence of accounts receivable and inventory turnover on the liquidity of tobacco industry businesses listed on the IDX from 2017 to 2019. On average, the current ratio is 270.2478 percent, the accounts receivable turnover rate is 2859.6389 percent, and the inventory turnover rate is 404.2167 percent.

Accounts receivable turnover has a negligible influence on liquidity in tobacco sector businesses listed on the IDX. Thus, accounts receivable turnover cannot be achieved due to the effect of liquidity on the tobacco sector businesses listed on the IDX throughout the research period.

Inventory turnover has a considerable impact on liquidity in tobacco sector businesses listed on the IDX. Thus, inventory turnover should be included when evaluating the effect of liquidity on tobacco sector businesses listed on the IDX throughout the research period.

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